National Air Quality and Emissions Trends Report, 1998

U.S. Environmental Protection Agency

Office of Air Quality Planning and Standards Emissions Monitoring and Analysis Division Air Quality Trends Analysis Group Research Triangle Park, North Carolina 27711

March 2000

About the Cover

The map on the cover displays the 1998 annual average $PM_{2.5}$ concentrations at monitoring sites in the Interagency Monitoring of PROtected Environments (IMPROVE) network. The IMPROVE network was established in 1987 to track visibility impairment in the nation's most pristine areas, like national parks and wilderness areas. (See Chapter 6 for more information on the IMPROVE network.) The size of the pie charts is proportional to the annual average concentration of measured $PM_{2.5}$. The slices of the pie charts show the percentages of the known chemical constituents of $PM_{2.5}$. The map reveals that rural $PM_{2.5}$ concentrations vary regionally, with sites in the East typically having higher annual average concentrations. Levels at most sites in the West are roughly less than half of those in the East.

Data Source: The IMPROVE network.

Disclaimer

This report has been reviewed and approved for publication by the U.S. Environmental Protection Agency's Office of Air Quality Planning and Standards. Mention of trade names or commercial products are not intended to constitute endorsement or recommendation for use.

Acknowledgments

The Trends Team would like to acknowledge the members of EPA's Office of Research and Development, Office of Atmospheric Programs, and Office of Transportation and Air Quality for peer reviewing this report prior to publication; Support for the statistical analyses of air toxics trends provided under EPA contract 68D70066; Colorado State University for providing summary data from the IMPROVE monitoring network; Support for desktop publishing and Web site development provided under EPA contract 68W99004; and the Trends Workgroup in EPA's Office of Air Quality Planning and Standards for providing comments throughout report development.

Preface

This is the twenty-sixth annual report on air pollution trends in the United States issued by the U.S. Environmental Protection Agency. The report is prepared by the Air Quality Trends Analysis Group (AQTAG) in Research Triangle Park, North Carolina and is directed toward both the technical air pollution audience and other interested parties and individuals.

The report can be accessed via the Internet at http://www.epa.gov/airtrends/. AQTAG solicits comments on this report and welcomes suggestions regarding techniques, interpretations, conclusions, or methods of presentation. Comments can be submitted via the website or mailed to:

Attn: Trends Team AQTAG (MD-14) U.S. EPA Research Triangle Park, NC 27711

Readers can access data from the Aerometric Information Retrieval System (AIRS) at http://www.epa.gov/airsdata/ and real time air pollution data at http://www.epa.gov/airnow/.

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Acronyms

AIRS	Aerometric Information Retrieval System	NARSTO	North American Research Strategy for Tropospheric Ozone
AQRV	Air-Quality Related Values	NESCAUM	Northeast States for Coordinated Air
AIRMoN	Atmospheric Integrated Assessment		Use Management
	Monitoring Network	NMOC	Non-Methane Organic Compound
CAA	Clean Air Act	NO_2	Nitrogen Dioxide
CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CARB	California Air Resources Board	NPS	National Park Service
CASAC	Clean Air Scientific Advisory Committee	NTI	National Toxics Inventory
CASTNet	Clean Air Status and Trends Network	O ₃	Ozone
CEMs	Continuous Emissions Monitors	OTAG	The Ozone Transport Assessment Group
CFR	Code of Federal Regulations	PAHs	Polyaromatic Hydrocarbons
CO	Carbon Monoxide	PAMS	Photochemical Assessment
CMSA	Consolidated Metropolitan Statistical		Monitoring Stations
	Area	PAN	Peroxyacetyl Nitrate
DST	Daylight Savings Time	Pb	Lead
EPA	Environmental Protection Agency	PCBs	Polychlorinated Biphenyls
FRM	Federal Reference Method	PM_{10}	Particulate Matter of 10 micrometers
GDP	Gross Domestic Product		in diameter or less
GLM	General Linear Model	$PM_{2.5}$	Particulate Matter of 2.5 micrometers in diameter or less
HAPs	Hazardous Air Pollutants	POM	Polycyclic Organic Matter
IADN	Integrated Atmospheric Deposition		Parts Per Million
- /	Network	ppm PSI	Pollutant Standards Index
I/M	Inspection and Maintenance Programs	RFG	Reformulated Gasoline
IMPROVE	Interagency Monitoring of PROtected	RVP	Reid Vapor Pressure
IVII KOVE	Environments	SLAMS	State and Local Air Monitoring
MACT	Maximum Achievable Control	JLAWIS	Stations
	Technology	SNMOC	Speciated Non-Methane Organic
MARAMA	Mid-Atlantic Regional Air		Compound
MDNI	Management Association	SO_2	Sulfur Dioxide
MDN	Mercury Deposition Network	SO_x	Sulfur Oxides
MSA	Metropolitan Statistical Area	TNMOC	Total Non-Methane Organic
MDL	Minimum Detectable Level	TDI	Compound
NAAQS	National Ambient Air Quality Standards	TRI TSP	Toxic Release Inventory Total Suspended Particulate
NADP	National Atmospheric Deposition	UATMP	Urban Air Toxics Monitoring Program
	Program	VMT	Vehicle Miles Traveled
NAMS	National Air Monitoring Stations	VOCs	Volatile Organic Compounds
NAPAP	National Acid Precipitation Assessment Program	μg/m³	Micrograms Per Cubic Meter